ABSTRACT OF THE DISCLOSURE

An automated method of detecting, and provisioning connections between interconnected nodes in a consolidated network element involves sending messages between the nodes. The messages are inserted into data frames sent from respective transmit ports through inter-node links, to respective receive ports. The messages contain information used to provision the receive ports at which they are received, and information for identifying equipment that generated, transmitted, and conveyed the message, respectively, so that the connectivity of the interconnected nodes can be verified.